



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 05-0280053

THE APPLICATION OF VALENCE OPERATING COMPANY TO CONSOLIDATE THE YANTIS (HILL ZONE) FIELD INTO THE COMO (RODESSA HILL, LO.) FIELD AND TO RENUMBER AND AMEND THE FIELD RULES FOR THE COMO (RODESSA HILL, LO.) FIELD, HOPKINS AND WOOD COUNTIES, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner
Laura Miles-Valdez - Legal Examiner

DATE OF HEARING: January 30, 2013

APPEARANCES: **REPRESENTING:**

APPLICANT:

Rick Johnston

Valence Operating Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Valence Operating Company ("Valence") requests to consolidate the Yantis (Hill Zone) Field, ID No. 99254 498, into the Como (Rodessa Hill, Lo.) Field, ID No. 19947 426, and renumber and amend the Field Rules for the Como (Rodessa Hill, Lo.) Field.

Field Rules for the Como (Rodessa Hill, Lo.) Field were adopted by Final Order No. 5-54,014, effective August 10, 1964. The Field Rules currently in effect for the field are summarized as follows:

1. 467'-1,320' well spacing;
2. 160 acre oil units;
3. Allocation based on 100% acres with a top MER oil allowable of 241 BOPD;
4. Surface casing provisions.

Valence requests that the Field Rules be renumbered and amended as follows:

1. Designation of the field as the correlative interval from 7,724 feet to 7,967 feet as shown on the log of the Valence Operating Company - Mary Lou Foster Lease, Well No. 1 (API No. 42-499-31110);
2. 330'-330' well spacing with no minimum between well spacing between vertical and horizontal drainhole wells and special provisions for "take points", 100' leaseline spacing for the first and last take points, a 33' "box rule" and "off-lease" penetration point for horizontal drainhole wells;
3. 160 acre oil units;
4. Oil allocation based on 100% acres with a top MER oil allowable of 241 BOPD.

The application is unopposed and the examiners recommend approval of the field consolidation and renumbering and amending the Field Rules for the Como (Rodessa Hill, Lo.) Field, as requested by Valence.

DISCUSSION OF THE EVIDENCE

The Como (Rodessa Hill, Lo.) Field was discovered in March 1964 at an average depth of 7,900 feet. There is currently one shut-in well and one operator carried on the oil proration schedule. The field operates under Field Rules providing for 467'-1,320' well spacing, 160 acre oil units and allocation based on 100% acres with a top MER oil allowable of 241 BOPD. Cumulative production from the field through September 2012 is 99.9 MBO and 65.1 MMCFG.

The Yantis (Hill Zone) Field was discovered in July 1950 at an average depth of 7,700 feet. There are currently four producing oil wells carried on the oil proration schedule and Valence is the only operator in the field. The field operates under Field Rules providing for 330'-660' well spacing, 40 acre oil units and allocation based on 100% acres with a top MER oil allowable of 101 BOPD. Cumulative production from the field through December 2012 is 180.4 MBO and 345.7 MMCFG.

Valence is proposing to consolidate the Yantis (Hill Zone) Field into the Como (Rodessa Hill, Lo.) Field. The proposed designated interval for the consolidated field is the entire correlative interval from 7,724 feet to 7,967 feet as shown on the log of the Valence Operating Company - Mary Lou Foster Lease, Well No. 1 (API No. 42-499-31110), J Walker Survey, A-607, Wood County, Texas. This interval includes all of the oil productive Rodessa formation. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. All of the reservoirs are continuous across the field area. The primary drive mechanism is a solution gas drive and the fields are in the later stages of primary depletion.

Valence is proposing to develop the Como (Rodessa Hill, Lo.) Field by drilling infill horizontal drainhole wells and requests Field Rules that will promote the efficient and effective development of the remaining hydrocarbons. Valence requests 330'-330' well spacing with no minimum between well spacing between vertical and horizontal drainhole wells and special provisions for "take points", 100' leaseline spacing for the first and last take points, a 33' "box rule" and "off-lease" penetration point for horizontal drainhole wells. Valence argues that the proposed no minimum between well spacing between vertical and horizontal drainhole wells is necessary to allow the drilling of horizontal drainhole wells, which may have to be placed very near vertical wells in some cases. Similar rules have been adopted in other tight reservoirs, including the Eagle Ford, Wolfcamp, Bone Springs, Cotton Valley and Barnett Shale formations.

Valence requests that a Field Rule be adopted which includes language relevant to the measurement of distances to lease lines for horizontal drainhole wells. Valence's proposed rule specifies that, for purposes of lease line spacing, the nearest "take point" in a horizontal well be used. This take-point could be a perforation in a horizontal well that is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased well. For purposes of the assignment of additional acreage pursuant to Statewide Rule 86, it is proposed that the distance between the first and last take-point in a horizontal drainhole well be used.

By allowing a 100' leaseline spacing for the first and last take points, an additional 230 feet of the reservoir is exposed to the horizontal lateral and drained. These reserves would go unrecovered if the 100' leaseline spacing for the first and last take points is not approved. Valence also proposes a 33' "box rule" for horizontal drainhole wells that would allow drainholes to deviate 33 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception. As drilled wells for which all points are located within the "box" would be considered in compliance with their drilling permits.

In some cases, it is beneficial to penetrate the reservoir off lease, while still having "take points" no closer to lease lines than allowed under the field rules. Valence requests that Field Rules for the subject field provide for an "off-lease" penetration point. Statewide Rule 86 requires that the penetration point of a horizontal drainhole be on the lease. In this field, a well generally requires approximately 600 feet of horizontal displacement to make the 90 degree turn from vertical to horizontal. If the penetration point is required to be on the lease, then the first point of production would be about 600 feet from the lease line. The proposed rule will allow approximately 300 feet of additional producing drainhole, which will result in the recovery of additional reserves. The Commission has adopted similar rules allowing offsite penetration points in other fields, after the operator has given notice to the mineral owners of the off-lease tract on which the penetration point is to be located and received no protest.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The Como (Rodessa Hill, Lo.) Field was discovered in March 1964 at an average depth of 7,900 feet.
 - a. There is currently one shut-in well and one operator carried on the oil proration schedule.
 - b. The field operates under Field Rules providing for 467'-1,320' well spacing, 160 acre oil units and allocation based on 100% acres with a top MER oil allowable of 241 BOPD.
3. The Yantis (Hill Zone) Field was discovered in July 1950 at an average depth of 7,700 feet.
 - a. There are currently four producing oil wells carried on the oil proration schedule and Valence is the only operator in the field.
 - b. The field operates under Field Rules providing for 330'-660' well spacing, 40 acre oil units and allocation based on 100% acres with a top MER oil allowable of 101 BOPD.
4. The Yantis (Hill Zone) Field should be consolidated into the Como (Rodessa Hill, Lo.) Field. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval.
5. The designated interval for the consolidated field should be the entire correlative interval between 7,724 feet to 7,967 feet as shown on the log of the Valence Operating Company - Mary Lou Foster Lease, Well No. 1 (API No. 42-499-31110), J Walker Survey, A-607, Wood County, Texas. This interval includes all of the oil productive Rodessa formation.
6. A spacing rule which utilizes "take-points" in a horizontal well for determination of distances to lease lines will prevent waste and will not harm correlative rights.
 - a. A take-point in a horizontal well in this field may be a perforation in a horizontal well that is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased portion of the wellbore.

- b. Adoption of the proposed rule will allow the horizontal drainhole length on a lease to be maximized.
 - c. For purposes of assignment of additional acreage pursuant to Statewide Rule 86, the distance between the first and last take-point in a horizontal well should be used.
- 7. A Field Rule providing for 330'-330' well spacing with no minimum between well spacing between vertical and horizontal drainhole wells and a special provision for 100' lease line spacing for the first and last take points is appropriate for the Como (Rodessa Hill, Lo.) Field.
 - a. The proposed no minimum between well spacing between vertical and horizontal drainhole wells is necessary to allow the drilling of horizontal wells, which may have to be placed very near vertical wells in some cases.
 - b. By allowing a 100' lease line spacing for the first and last take points, an additional 230 feet of the reservoir is exposed to the horizontal lateral and drained. These reserves would go unrecovered if the 100' lease line spacing for the first and last take points is not approved.
- 8. The proposed 33' "box rule" is necessary to allow operators reasonable minor deviations from the wellbore track that has been permitted.
- 9. Allowing an "off-lease" penetration point will result in maximum producing drainhole length, thereby increasing ultimate recovery from horizontal drainhole wells. To protect correlative rights, prior notice and opportunity to object should be given to the mineral owners of "off-lease" surface locations.
- 10. Similar rules have been adopted in other tight reservoirs, including the Eagle Ford, Wolfcamp, Bone Springs, Cotton Valley and Barnett Shale formations.

CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was given to all persons legally entitled to notice.
- 2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
- 3. Consolidating the Yantis (Hill Zone) Field into the Como (Rodessa Hill, Lo.) Field and renumbering and amending the Field Rules for the Como (Rodessa Hill, Lo.) Field will prevent waste, protect correlative rights, satisfy statutory requirements and promote development of the field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission consolidate the Yantis (Hill Zone) Field into the Como (Rodessa Hill, Lo.) Field and renumber and amend the Field Rules for the Como (Rodessa Hill, Lo.) Field, as requested by Valence Operating Company.

Respectfully submitted,



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